

1 **WHAT IS CLAIMED IS:**

2 1. A mobile information network browser device with audio feedback
3 capability, the information network comprising a plurality of network servers, the
4 browser device comprising:

5 a wireless communication interface operable to transmit data to a network
6 server, and to receive data from the network server;
7 an audio interface operable to receive data from the wireless communication
8 interface;
9 wherein the data transmitted to the network server includes a request for
10 information, and the data received from the network server includes information
11 responsive to the request.

1 2. The browser device, as set forth in claim 1, further comprising:
2 a voice interaction system operable to recognize commands from a user's
3 speech input for interaction with the browser device including the
4 request for information.

1 3. The browser device, as set forth in claim 1, further comprising:
2 a mobile audio device having an audio converter, the audio converter being
3 operable to receive the information responsive to the request, the audio
4 converter being further operable to convert the responsive information
5 to an audio signal for output to an audio output device.

1 4. The browser device, as set forth in claim 2, wherein the audio output device
2 includes at least one audio speaker.

1 5. The browser device, as set forth in claim 3, wherein the audio output device
2 includes a set of headphones.

1 6. The browser device, as set forth in claim 3, wherein the audio converter
2 outputs the audio signal to a short-range wireless radio, the short-range wireless radio
3 being operable to broadcast the audio signal to a channel on a car radio.

1 7. The browser device, as set forth in claim 3, wherein the audio converter
2 outputs the audio signal to a car radio.

1 8. The browser device, as set forth in claim 3, wherein the audio output device
2 includes a cassette adapter.

1 9. The browser device, as set forth in claim 3, wherein the audio output device
2 includes a data storage medium.

1 10. The browser device, as set forth in claim 2, further comprising:
2 a microphone for receiving the speech input from the user.

1 11. The browser device, as set forth in claim 1, further comprising:
2 first program instructions for converting the responsive information from a
3 text format to an audio format.

1 12. The browser device, as set forth in claim 11, wherein the first program
2 instructions are loaded and executed in the network server.

1 13. The browser device, as set forth in claim 11, wherein the first program
2 instructions are loaded and executed in the audio interface.

1 14. The browser device, as set forth in claim 1, further comprising:
2 first program instructions for encrypting the user input prior to being
3 transmitted to the wireless communication interface.

1 15. The browser device, as set forth in claim 1, further comprising:
2 first program instructions for decrypting the responsive information.

16. The browser device, as set forth in claim 1, further comprising:
first program instructions for compressing the user input prior to being
transmitted to the wireless communication interface.

17. The browser device, as set forth in claim 1, further comprising:
first program instructions for decompressing the responsive information.

18. The browser device, as set forth in claim 1, further comprising:
first program instructions for allowing the user to enter personal information to
customize interaction with the browser device.

19. The browser device, as set forth in claim 6, further comprising:
first program instructions for allowing the user to enter personal information to
customize interaction with the browser device.

20. The browser device, as set forth in claim 11, further comprising:
second program instructions for allowing the user to enter personal
information to customize interaction with the browser device.

21. The browser device, as set forth in claim 1, further comprising:
an input buffer for storing the responsive information until the user commands
the browser device to playback the responsive information.

22. The browser device, as set forth in claim 3, further comprising:
an input buffer for storing the responsive information until the audio converter
processes it.

23. The browser device, as set forth in claim 3, further comprising:
a position-keeping system for providing the location of the mobile audio
device to the network server via the wireless communication network,
wherein the responsive information is based on the location of the
mobile audio device.

1 24. A portable browser system with feedback capability for browsing an
2 information network comprising:
3 a wireless communication network;
4 at least one data processor in communication with the wireless communication
5 network, the at least one data processor being operable to execute first
6 program instructions for receiving a user's input, second program
7 instructions for requesting information from the information network,
8 third program instructions for receiving responsive information from
9 the information network, and fourth program instructions for
10 transmitting the responsive information received from the information
11 network; and
12 an audio output device operable to receive the responsive information from the
13 data processor, the audio output device being further operable to output
14 the responsive information to the user in audio format.

1 25. The browser system, as set forth in claim 24, further comprising:
2 a voice interaction system operable to recognize commands from a user's
3 speech input for interaction with the browsing system.

1 26. The browser system, as set forth in claim 24, further comprising:
2 an audio converter coupled to the audio output device, the audio converter
3 being operable to receive the responsive information from the data
4 processor, the audio converter being further operable to convert the
5 responsive information to an audio signal for output to the audio output
6 device.

1 27. The browser system, as set forth in claim 24, wherein the audio output
2 device includes at least one audio speaker.

1 28. The browser system, as set forth in claim 24, wherein the audio output
2 device includes a cassette adapter.

1 29. The browser system, as set forth in claim 24, wherein the audio output
2 device includes a data storage medium.

1 30. The browser system, as set forth in claim 24, wherein the audio output
2 device includes a set of headphones.

1 31. The browser system, as set forth in claim 24, wherein the audio output
2 device includes a short-range wireless radio, the audio converter being operable to
3 output the audio signal to the short-range wireless radio, the short-range wireless radio
4 being operable to broadcast the audio signal to a channel on a car radio.

1 32. The browser system, as set forth in claim 25, further comprising:
2 a microphone in communication with the voice interaction system for
3 receiving the user's speech.

1 33. The browser system, as set forth in claim 25, further comprising:
2 a telephone in communication with the voice interaction system for receiving
3 the user's speech input.

1 34. The browser system, as set forth in claim 24, further comprising:
2 fifth program instructions for converting the responsive information from a
3 text format to an audio format.

1 35. The browser system, as set forth in claim 34, wherein the fifth program
2 instructions are loaded and executed in the network server.

1 36. The browser system, as set forth in claim 34, wherein the fifth program
2 instructions are loaded and executed in the data processor.

1 37. The browser system, as set forth in claim 24, further comprising:
2 fifth program instructions for allowing the user to enter personal information
3 to customize interaction with the browser system.

1 38. The browser system, as set forth in claim 24, further comprising:
2 fifth program instructions for encrypting the user input prior to being
3 transmitted to the wireless communication network.

1 39. The browser system, as set forth in claim 24, further comprising:
2 fifth program instructions for decrypting the responsive information.

1 40. The browser system, as set forth in claim 24, further comprising:
2 fifth program instructions for compressing the user input prior to transmitting
3 the user input to the wireless communication network.

1 41. The browser system, as set forth in claim 24, further comprising:
2 fifth program instructions for decompressing the responsive information.

1 42. The browser system, as set forth in claim 24, further comprising:
2 a position-keeping system for providing the location of the audio output device
3 to the information network via the wireless communication network, wherein the
4 responsive information is based on the location of the audio output device.

1 43. The browser system, as set forth in claim 24, further comprising:
2 an input buffer for storing the responsive information until the user commands
3 the browser system to playback the responsive information.

1 44. The browser system, as set forth in claim 26, further comprising:
2 an input buffer for storing the responsive information until the audio converter
3 processes it.

1 45. A method of browsing an information network via a wireless
2 communication network and receiving responsive information in audio format using a
3 mobile audio device, the method comprising:
4 transmitting input from a user via the wireless communication network to a
5 data processor;

6 processing the input to determine when the user enters a valid browsing
7 command;
8 transmitting the browsing command to a server on the information network;
9 receiving the responsive information from the server;
10 formatting the responsive information in audio format;
11 transmitting the formatted audio information to the mobile audio device via
12 the wireless communication network;
13 generating an audio output signal in the mobile audio device; and
14 transmitting the audio output signal to an audio output device.

1 46. The method of claim 45 wherein a voice interaction system includes the
2 data processor for processing the input from the user.

1 47. The method of claim 46 wherein the input from the user is voice input.

1 48. The method of claim 45 wherein formatting the responsive information in
2 audio format includes executing program instructions to convert the information from
3 a text format to an audio format in the server.

1 49. The method of claim 45 wherein formatting the responsive information in
2 audio format includes processing program instructions to convert the information
3 from a text format to an audio format in the mobile audio device.

1 50. The method of claim 45, further comprising:
2 processing program instructions that allow the user to enter information to
3 customize interaction with the information network.

1 51. The method of claim 50, wherein the user enters information to customize
2 interaction with the information network from a telephone.

1 52. The method of claim 50, wherein the user enters information to customize
2 interaction with the information network from a personal computer.

1 53. The method of claim 45, wherein transmitting the audio output signal to
2 an audio output device includes outputting the audio output signal to at least one
3 audio speaker.

1 54. The method of claim 45, wherein the audio output device includes a
2 cassette adapter.

1 55. The method of claim 45, wherein the audio output device includes a data
2 storage medium.

1 56. The method of claim 45, wherein transmitting the audio output signal to
2 an audio output device includes outputting the audio output signal to a set of
3 headphones.

1 57. The method of claim 45, wherein transmitting the audio output signal to
2 an audio output device includes outputting the audio output signal to a short-range
3 wireless radio, the short-range wireless radio being operable to broadcast the audio
4 output signal to a channel on a car radio

1 58. The method of claim 45, wherein transmitting speech input from a user to
2 a voice interaction system via the wireless communication network includes
3 encrypting the speech input.

1 59. The method of claim 45, wherein generating an audio output signal in the
2 mobile audio device includes decrypting the responsive information.

1 60. The method of claim 45, wherein transmitting speech input from a user to
2 a voice interaction system via the wireless communication network includes
3 compressing the speech input.

1 61. The method of claim 45, wherein generating an audio output signal in the
2 mobile audio device includes decompressing the responsive information.

1 62. The method of claim 45 wherein the mobile audio device includes at least
2 a portion of a position-keeping system, the method further comprising:

3 providing the position of the mobile audio device to the information network
4 via the wireless communication network, wherein the responsive
5 information is based on the location of the mobile audio device.

1 63. The method of claim 45, further comprising:
2 storing the responsive information in an input buffer until the user commands
3 the browser system to playback the responsive information.

1 64. The method of claim 47, further comprising:
2 storing the responsive information in an input buffer until executing program
3 instructions to convert the information from a text format to an audio
4 format.

1 65. A mobile information network browser device with feedback capability,
2 the information network comprising a plurality of network servers, the browser device
3 comprising:
4 a communication interface operable to transmit a request for information to a
5 network server, and to receive data responsive to the request from the
6 network server; and
7 a mobile audio device operable to transmit the request for information to the
8 communication interface and to receive data responsive to the request
9 from the communication interface, the mobile audio device being
10 further operable to receive input from a user, to convert the input to a
11 digital signal, and to transmit the digital signal to the communication
12 interface, the mobile audio device being further operable to receive the
13 data responsive to the request from the communication interface, and
14 to convert the data to an audio signal for output to an audio output
15 device.

1 66. The browser device, as set forth in claim 65, further comprising:
2 a voice interaction system operable to recognize commands from a user's
3 speech input for interaction with the browser device including the
4 request for information.

1 67. The browser device, as set forth in claim 65, wherein the audio output
2 device includes at least one audio speaker.

1 68. The browser device, as set forth in claim 65, wherein the audio output
2 device includes a set of headphones.

1 69. The browser device, as set forth in claim 65, wherein the mobile audio
2 device outputs the audio signal to a short-range wireless radio, the short-range
3 wireless radio being operable to broadcast the audio signal to a channel on a car radio.

1 70. The browser device, as set forth in claim 65, wherein the audio converter
2 outputs the audio signal to a car radio.

1 71. The browser device, as set forth in claim 65, wherein the audio output
2 device includes a cassette adapter.

1 72. The browser device, as set forth in claim 65, wherein the audio output
2 device includes a data storage medium.

1 73. The browser device, as set forth in claim 65, further comprising:
2 a microphone for receiving the speech input from the user.

1 74. The browser device, as set forth in claim 65, wherein the mobile audio
2 device is further operable to encrypt the user input prior to transmitting the user input
3 to the communication interface.

1 75. The browser device, as set forth in claim 65, wherein the mobile audio
2 device is further operable to decrypt the responsive data.

1 76. The browser device, as set forth in claim 65, wherein the mobile audio
2 device is further operable to compress the user input prior to transmitting the user
3 input to the communication interface.

1 77. The browser device, as set forth in claim 65, wherein the mobile audio
2 device is further operable to decompress the responsive data.

1 78. The browser device, as set forth in claim 65, wherein the information
2 network includes a personalization server, wherein the personalization server is
3 operable to execute program instructions for allowing the user to enter personal
4 information to customize interaction with the browser device.

1 79. The browser device, as set forth in claim 78, wherein the personalization
2 server is operable to store the user's personal information and to retrieve the user's
3 personal information.

1 80. The browser device, as set forth in claim 65, wherein one of the plurality
2 of the network servers is a content server, the content server including a content
3 database, the content server being operable to search the content database for the
4 information requested by the user.

1 81. The browser device, as set forth in claim 80, wherein the content server is
2 further operable to search at least one other of the plurality of network servers when
3 the content database does not include the information requested by the user.

1 82. The browser device, as set forth in claim 81, wherein the content server
2 stores the information requested by the user in the content database when the
3 information is found on the at least one other of the plurality of network servers.

1 83. The browser device, as set forth in claim 65, further comprising:
2 a position-keeping system for providing the location of the mobile audio
3 device to the information network via the communication network,
4 wherein the responsive information is based on the location of the
5 mobile audio device.

1 84. The browser device, as set forth in claim 65, further comprising:
2 an input buffer for storing the responsive information until the user commands
3 the browser device to playback the responsive information.

1 85. The browser device, as set forth in claim 65, further comprising:
2 an input buffer for storing the responsive information until the mobile audio
3 device converts the responsive information to an audio signal for
4 output to an audio output device.

1 86. A mobile information network browser device with audio feedback
2 capability, the information network comprising a plurality of network servers, the
3 browser device comprising:
4 a communication interface operable to receive data from at least one of the
5 network servers; and
6 a mobile audio device operable to receive the data from the communication
7 interface, the mobile audio device being further operable to convert the
8 data to an audio signal for output to a car radio.

1 87. The browser device, as set forth in claim 86, wherein operation of the
2 mobile audio device is controlled with voice commands.

1 88. The browser device, as set forth in claim 86, wherein operation of the
2 mobile audio device is controlled with control switches.

1 89. The browser device, as set forth in claim 86, wherein the communication
2 interface is operable to receive the data from a wireless communication network.

1 90. A mobile information network browser device with audio feedback
2 capability, the information network comprising a plurality of network servers, the
3 browser device comprising:

4 a communication interface operable to receive data from at least one of the
5 network servers; and
6 a mobile audio device operable to receive the data from the communication
7 interface, the mobile audio device being further operable to convert the
8 data to an audio signal for output to a telephone.

1 91. The browser device, as set forth in claim 90, wherein operation of the
2 mobile audio device is controlled with voice commands.

1 92. The browser device, as set forth in claim 90, wherein operation of the
2 mobile audio device is controlled with control switches.

1 93. The browser device, as set forth in claim 90, wherein the communication
2 interface is operable to receive the data from a wireless communication network.